In the Claims:

Please cancel claims 1-3, 5-21 and 26-29 without prejudice.

Please amend claims 22, 30 and 32 as follows:

Claims 1-21. (canceled)

22. (currently amended)   ~~The~~ A method ~~of claim 21, further~~ comprising:

transporting working fluid from a source through an inner channel of a probe to change a temperature of tissue adjacent the probe;

transporting the working fluid through a concentric outer channel of the probe back to the source;

sensing a first temperature of the tissue at a first location using a first temperature sensor coupled to the probe;

sensing a second temperature of the tissue at a second location using a second temperature sensor spaced apart from the first temperature sensor, the difference between the first and second temperatures being used to determine a thermal property of the tissue;

comparing the first and second temperatures; and

calculating a thermal transport property of the tissue based on the comparison.

23. (previously presented) The method of claim 22, further comprising determining the health of the tissue based on the thermal transport property.

24. (previously presented) The method of claim 23, determining the health comprising determining whether the tissue is alive or dead.

25. (currently amended) ~~The~~ A method ~~of claim 21, further~~ comprising:

transporting working fluid from a source through an inner channel of a probe to change a temperature of tissue adjacent the probe;

transporting the working fluid through a concentric outer channel of the probe back to the source;

sensing a first temperature of the tissue at a first location using a first temperature sensor coupled to the probe;

sensing a second temperature of the tissue at a second location using a second temperature sensor spaced apart from the first temperature sensor, the difference between the first and second temperatures being used to determine a thermal property of the tissue;

comparing the first and second temperatures; and

adjusting a flow rate of the working fluid based on the comparison.

Claims 26-29. (canceled)

30. (currently amended) ~~The~~ A media ~~of claim 29, further~~ comprising computer-executable instructions for:

obtaining a first temperature of tissue sensed by a first temperature sensor coupled to a heat transfer probe;

obtaining a second temperature of the tissue sensed by a second temperature sensor spaced apart from the first temperature sensor;

comparing the first and second temperatures;

calculating a thermal transport property of the tissue from the comparison

of the first and second temperatures; and

indicating a health of the tissue based on the thermal transport property.

31. (previously presented) The media of claim 30, the instructions for indicating the

health comprising instructions for indicating whether the tissue is alive or dead.

32. (currently amended) ~~The~~ A media ~~of claim 29, further~~ comprising computer-

executable instructions for:

obtaining a first temperature of tissue sensed by a first temperature

sensor coupled to a heat transfer probe;

obtaining a second temperature of the tissue sensed by a second

temperature sensor spaced apart from the first temperature sensor;

comparing the first and second temperatures;

calculating a thermal transport property of the tissue from the comparison

of the first and second temperatures; and

providing a signal to a controller used for varying a flow rate of working

fluid.